

Horses and Mussels Policy Statement
Big South Fork National River and Recreation Area
April 2002

Existing Situation

Many mussel species have been extirpated from the Big South Fork of the Cumberland River, and others have been driven to near extinction. The cause of mussel decline in the river is poor water quality that has resulted from human activities. Contaminated mine drainage and siltation and pollution from adjacent land use practices contribute to this degraded water quality.

Another factor that negatively impacts mussels in the Big South Fork is the recreational use of horses which sometimes results in the crushing of mussels. Horses and horseback riders cross the river at two designated areas: Station Camp and Big Island¹. These areas are also inhabited by five species of federally endangered mussels. National Park Service and U.S. Fish and Wildlife Service biologists have collected direct evidence that horses sometimes crush these mussels with their hooves while crossing the river. While not believed to be a direct cause of mussel population decline, the crushing of mussels by horses was raised as a concern by the U.S. Fish and Wildlife Service. The National Park Service was asked to mitigate the conflict to avoid a "takings" under the Endangered Species Act.

To mitigate the impact of horses on mussels, the National Park Service has implemented controlled crossings at Station Camp and Big Island, as recommended by the U.S. Fish and Wildlife Service. White flags in the river mark a preferred pathway for horses and signs explain the route horses must follow and why. These controlled crossings have reduced the number of conflicts between horses and mussels, but they do not represent a long-term solution to the problem.

The National Park Service is seeking funding to study options and alternatives for reducing horse-mussel conflicts in the Big South Fork. These options could include 1) construction of horse bridges over the river, 2) hardening of crossings in the river, 3) relocation of the horse crossings to a less sensitive location, 4) removal of horse crossings from the river, and 5) relocation of mussels to a more suitable location.

Proposal to Augment and Reintroduce Mussels into the River

The preferred alternative in the environmental assessment (EA) would not have the effect of curtailing or eliminating horse use in the Big South Fork of the Cumberland River. Currently, a conflict exists between horses and mussels as identified by state and federal biologists, and the U.S. Fish and Wildlife Service has raised this as a concern to the National Park Service. The proposal in the EA to augment existing mussel populations and reintroduce other species does not exacerbate this conflict; rather, if successful, the program could ultimately serve to alleviate the problem. The proposed action is designed to increase and stabilize populations of endangered species with the ultimate goal of removing them from the endangered species list. This would have a positive net benefit to all forms of river recreation, particularly horseback riding.

¹ Horses are also known to cross at other "customary use" areas.